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SYSTEM AND METHOD FOR INTERNET STREAMING OF 3D ANIMATED CONTENT

ABSTRACT OF THE DISCLOSURE

A system and method facilitating the production, processing, and Internet distribution of 3D animated movies including 3D multipath movies. A key reduction algorithm reduces the keyframes associated with the 3D movie to facilitate the streaming of the data over the Internet. An animation optimization and texture optimization algorithm allows the system to get statistical information of the portions of the 3D object which are invisible (outside the view frame), and whose animation and texture data may thus be safely removed. If the 3D object is within the view frame, the optimization algorithm gathers information about the distance and size of the 3D object and its associated texture data within the frame. The system and method further allows creation of various versions of the 3D object from a single production process. The various versions are tagged with an identifier identifying the target platforms and media platforms in which they are suitable for display. During playback, the correct version of the 3D object is selected for display based on the detected Internet bandwidth and/or CPU speed. To stream the 3D animation content over the Internet for real-time playback, the present system and method allows the data to be divided into an upfront file and various stream files. The upfront file is downloaded prior to the playback of the movie. The stream files are streamed over the Internet and made available to the 3D engine in time for their use.